

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: SOFER, Eli

Serial No. : 10/519,483
Filed : September 15, 2005
For : METHOD AND APPARATUS FOR A
MULTISENSOR IMAGING AND
SCENE INTERPRETATION SYSTEM

Group Art Unit: 2621
Examiner: Tung Vo

Tel Aviv, Israel
November 16, 2008

Hon. Commissioner of Patents and Trademarks
Alexandria, VA 22313

Sir:

RESPONSE TO OFFICE ACTION AND
REQUEST FOR EXAMINER AMENDMENT

In response to the Office Action of July 31, 2008, and pursuant to the interview of October 27, 2008, Applicant presents the following Remarks (see next page):

R E M A R K S

The Applicant has received and carefully considered the Office Action of July 31, 2008.

The Applicant wishes to express his appreciation to the Examiner for the interview conducted with the undersigned, Applicant's attorney, in which an agreement was reached.

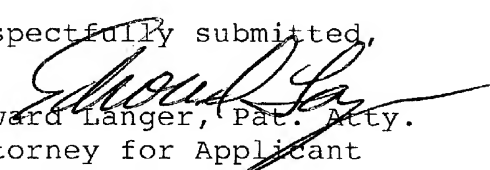
As discussed in the interview, the proposal submitted with the letter of 12 October, 2008 (copy attached) has been accepted and forms the basis for the amendment of independent claims 1 and 27, which have been indicated to be allowable, per the attached interview summary. The dependent claims were also deemed to be allowable based on this proposal.

Applicant hereby requests the Examiner to implement these amendments to these claims by Examiner's amendment.

It is requested that the Examiner present the format of the claims after amendment, in the next Office Action.

Based on the above, it is requested that the Notice of Allowance be sent as early as possible.

Respectfully submitted,


Edward Langer, Pat. Atty.
Attorney for Applicant
Reg. No. 30, 564

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INTELLECTUAL PROPERTY DEPARTMENT

EDWARD LANGER B.S.E.E., M.B.A., J.D., ADV. & PAT. ATT. (Israel Bar), REG. US PAT. ATT. (Pennsylvania Bar)
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Tel-Aviv, October 12, 2008

Ref: 499025

Mr. Tung Vo, Examiner
US Patent Office
Washington, D.C. 20231
Group Art Unit: 2621

by Fax: **+1-571-273-7340**

Re: US Patent Application S/N. 10/519,483 Filed Sept. 15, 2005 entitled:
**METHOD AND APPARATUS FOR A MULTISENSOR IMAGING AND
SCENE INTERPRETATION SYSTEM**
Inventor: SOFER, Eli
Our Ref.: 1887

Dear Mr. Vo,

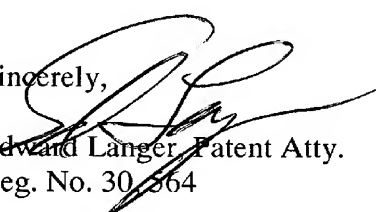
This letter is to confirm our scheduled meeting of October 27, 2008, at 10 ^{PM} ~~AM~~.

We have received the Office Action of July 31, 2008 and I would like to discuss the following proposal, per the attached revised claim 1 and claim 27 in accordance with your suggestion to accept claims 48 and 51 if re-written.

Please confirm receipt of this material by email to the above email and to a second email address:
edlanger@netvision.net.il

Thank you.

Sincerely,


Edward Langer, Patent Atty.
Reg. No. 30,364

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Keren Schiller Massuri
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Shai Shulman
Tsali Shalev
* Maya Sidis-Vager
Hanna Yanovsky

* Admitted also in New York
** Admitted also in Pennsylvania
*** Admitted also in England
**** Admitted also in California

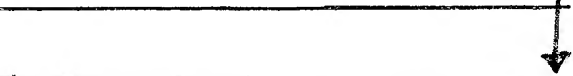
In the claims:

1. (currently amended) A system for aiding a ~~user~~ person with a visual impairment or visual obstruction, comprising:


means for sensing time/space characteristics and physical characteristics information about an a plurality of objects in a field of view of said person;

means for identifying, interpreting, decomposing, and synthesizing said time/space characteristics and physical characteristics information and for high-level characterizing ~~(recognition)~~ the said plurality of objects; and

~~audible information delivery device (Mmeans for verbally communicating) for audibly output and input information between said system and describing to the said user, the characterization of the object and said interpretation about the object.~~



~~46. (new) The system according to claim 1, wherein said output information further comprises a scene description about said surrounding environment within the field of view of said person, and~~



~~48. (new) The system according to claim 46 wherein said scene description comprises a hierarchy of object classes identified by said system, together with their position information, physical characteristics, and relative velocity vectors indicating motion.~~

27. (currently amended) A method for detecting, analyzing, and identifying, and reporting at least one a plurality of objects by name to a visually impaired or blind person in a field of vision view of said person, and notifying the user, comprising the steps of:

providing a 3-D laser imaging system to accurately measure both the coordinates of said plurality of objects in both static and dynamic motion and the characterization of the relationships between said plurality of objects in relation to said person;

acquiring a plurality of 3-D visual images of and information about said at least one plurality of objects;

processing said plurality of 3-D visual images and said information;

storing said information of said plurality of objects by names in a hierarchy utilizing a structured World Model;

identifying said at least one plurality of objects, and audibly communicating verbally with said person to report said information about ing at least one said plurality of objects in said field of vision view;

~~51. (new) The method of claim 27 further comprising:~~

→ reflecting and capturing laser pulses from the surfaces of said plurality of objects present in close range to said person to produce a "cloud" of spatial pixels (voxels) representing points on all said surfaces which can be observed from said person's point of view;

applying a set of low-level algorithms to decompose said "cloud" into a set of regular surfaces defined by parameters of type, dimensions, orientation in space, and relative (to said user) velocity vector; and

applying a set of high-level algorithms to act on said surfaces to combine them into identified 3-D objects with assigned names.

Interview Summary	Application No.	Applicant(s)	
	10/519,483	SOFER, ELI	
	Examiner	Art Unit	
	Tung Vo	2621	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Tung Vo. (3) _____
 (2) Edward Langer, Reg. No. 30,564. (4) _____

Date of Interview: 27 October 2008.

Type: a) ☐ Telephonic b) ☐ Video Conference
 c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.
 If Yes, brief description: _____

Claim(s) discussed: 1 and 27.

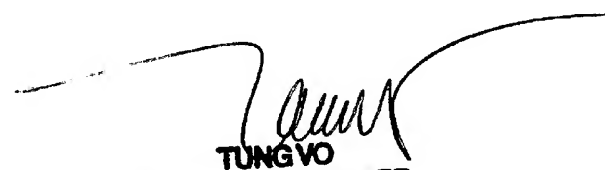
Identification of prior art discussed: _____

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant proposed to amend claims 1 and 27 as examiner suggested by incorporating claims 46, 48, and 51. A review of dependent claims indicated that claims 2-5, 7, 31, 35, 38-41, 43-45 and 52-53 will be allowable. If additional claims to be considered, an RCE will be needed. Applicant may request Examiner to amend claims by Examiner's amendment.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.


TUNG VO
PRIMARY EXAMINER

/Tung Vo/
 Primary Examiner, Art Unit 2621